



JOHNSON

WINDOW SCREENS

JOHNSON METAL PRODUCTS COMPANY -- ERIE, PENNA.

A Johnson Screen FOR EVERY REQUIREMENT

Johnson Screens are furnished custom-built in a wide variety of sturdy types to meet the demands of any window, door or porch installation. Material for their frames may be galvanized or stainless steel, aluminum or bronze. Sixteen mesh .0113 bronze wire cloth is standard, but other commercial weaves are supplied when individual tastes or special conditions dictate.

Materials used in the manufacture of Johnson Screens are the best the market affords. They are fabricated in the most modern of screen factories—and by artisans of many years experience who have furnished over a million screens for many of America's finest

public buildings, as well as for thousands of the most comfortable homes.

There is a large variety of conditions under which screens must be installed. They vary to some extent with the type of screen frame to be used but particularly are dependent upon the style of window, whether wood or metal sash, the type of hardware chosen, the expected use of drapes, Venetian blinds, flower boxes, and other accessories.

For conditions out of the ordinary and other than those described below, architects are invited to refer their specific problems to Johnson Engineering Department which is maintained to aid in the solution of these problems.

Sliding Screens

The customary method of installing screens is in channel guides to slide either vertically or horizontally. For double hung sash vertical sliding screens are the traditional application of screens to windows.

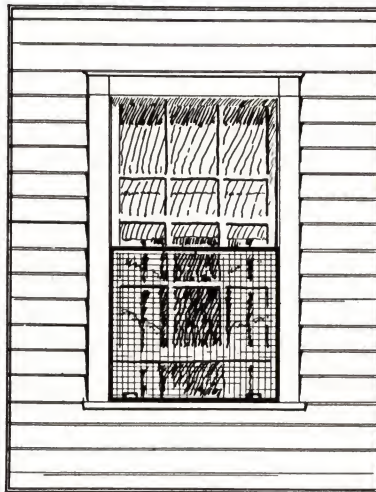
No limitations regarding awnings, shutters, Venetian blinds or other accessories to windows are encountered with vertical sliding screens. Economical practice provides a screen for only one-half of a double hung window—the screen placed ordinarily over the lower sash. Full length channel guides allow raising to the upper half for cleaning windows, or when otherwise desired. The screen makes fly-tight contact with the meeting rail—thus allowing its use properly in either position. When full coverage of a double hung window is desired, two screens, sliding in double channel guides, or, for multiple sash, multiple screens and guides, are supplied.

The installation detail of Johnson sliding screens is given on page 8. Guides are rolled channels of steel, bronze or aluminum, and those for one side are shallower than the other, making insertion of the screens and their removal easier. The springs that slide with the screens in the channels are tempered to endure a lifetime of proper service. Handle lifts on the inside of the screens make operation easy.

Top and Side Hung

Screens to swing from the top may be supplied either with pivots or top hangers. These are particularly suited for double hung windows where a single screen is desired.

A Top Hung Screen has the further advantage that it is particularly easy to install and take down. With top hangers, all that is required is to slip two metal loops over their corresponding hooks on the upper part of the window frame, and the screen is in place. Pivot bolts on the top, to fit sockets in the jamb, may be used as alternate supports. These are held in place by com-



pression springs, controlled by small finger levers. Rods may be hinged to the side frames to hold the screen open while washing windows.

Side Hung Screens likewise give full window area coverage and can be used in practically every type of installation except where there are shutters on the windows.

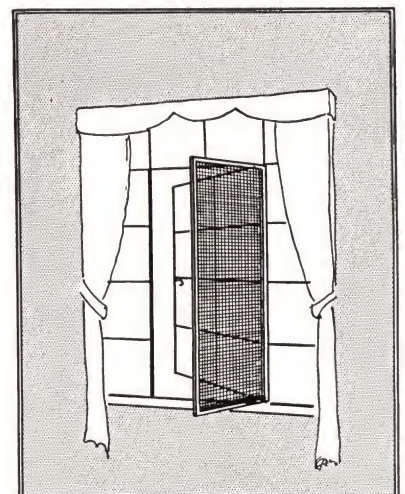
This type is sometimes preferred because, when opened, the entire screen is away from the window. Side Hung Screens are the most satisfactory type for use with crowned top, arched or special pattern windows. On double hung windows, screens open outward. For casement windows that open outward, this type screen is installed on the inside and

swings inward. However, where window boxes are used, neither this type, nor the Top Hung Screen may be installed to swing out.

Johnson Side Hung Screens may be attached by hinges, or by pivot bolts that snap into recesses at the top and bottom of the window frames. This last type is usually preferred for its greater ease of removal and installation.

For unusually wide or double casement windows, the Johnson Double Side Hinged or Side Pivoted Screen is recommended. The extra sturdy Johnson frame construction permits an unusually large screen area, without the necessity of using unsightly external braces to keep the frames from flexing.

As in the case of Single Side Hung, these screens can be mounted on inside of casement windows that open outward.



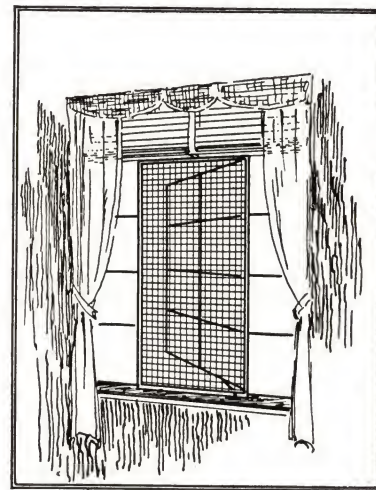
On most windows using this type of installation, the left-hand section is held stationary by a lock bolt. Thus—when the spring bolt locking the two sections together is released, only the right-hand portion swings open. A narrow astragal is incorporated in the free moving section to cover the light line where the two screens meet.

This type of screen can also be attached by hinges instead of spring pivot bolts. As in the case of Single Side Hung Screens that open outward, these screens are especially suitable for use with crowned top, arched or special pattern windows not obstructed by shutters or window boxes.

Stationary Screens

The most satisfactory method of making insect-tight inswinging case-ments is by stationary screens. Regardless of the type of opening—circular, triangular, bowed, arched or crowned—it can be fitted exactly with a Johnson Stationary Screen. As every Johnson Screen is custom-made to your exact specifications, special designs present no particular problems.

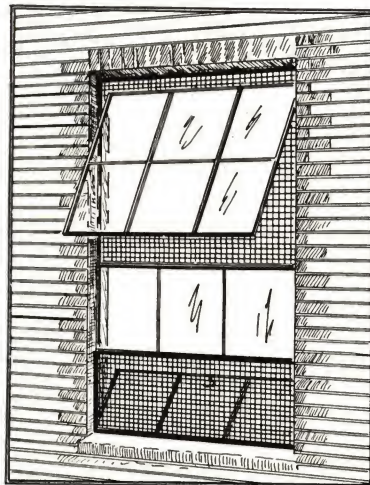
Johnson Stationary Screens are held in place by spring bolts, that will not rust or stick—even after being exposed to the weather all year. On some installations, such as basement windows, or ventilation ducts with metal frames, where permanent all-year installation is desired, the screens can be screwed to the window frames. Special wire guards are often used in addition to standard wire cloth on installations of this type.



Screens for Industrial Windows

Installation of screens is frequently desired in offices, restaurants, factories, auditoriums, dairies and other places where sash other than the ordinary residential types are found.

The Johnson Company has developed practical methods of screening all the standardized makes of steel and wood sash—whether center pivoted, transom type, extension type or projected.



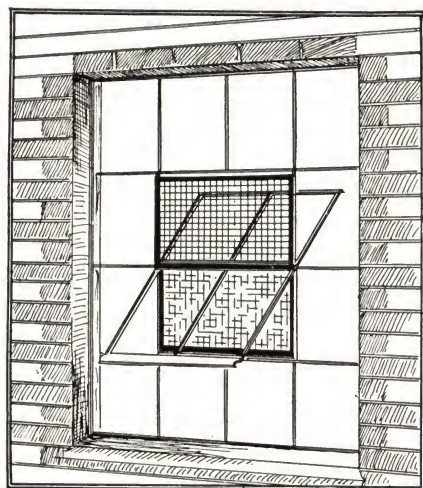
The illustration below at the left indicates one such special application to a steel horizontal center pivoted sash. The floating baffle at the axis maintains contact at all degrees of opening of the leaf, keeping the vent fly tight under all circumstances. Special clips, easily attached to hold the screen in position, do not interfere with quick and convenient removal of the screens when so desired.

Screened Porches and Doors

Metal frame screen porch enclosures are almost universally preferable to those of wooden structure because of their minimum interference with light and ventilation. While strength and permanency are not sacrificed, artistic design and harmony can be achieved through the use of the frames that are included in the wide Johnson Line.

Whatever the designs of the porch openings, they may be rendered insect-tight with Johnson Custom-Built Screens. Because of the ruggedness inherent in Johnson Frames, the braces which exaggerate the "shut-in" feeling on a porch are seldom needed. Details of construction may be had on reference to the factory.

Johnson has a complete line of metal frame screen doors. They are similar in design to the Cap Type Screen Frames. A typical cross-section is shown on page 11. Because of their sturdiness, they require a minimum of bracing, and are noted for the continuous wear and punishment they will endure.



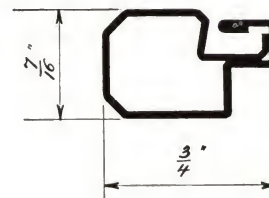
Types of Johnson Screen Frames

DUREVER

For low cost general housing, no other metal frame screen gives more satisfaction than the Johnson Durever line. Every inch and a quarter of the narrow tubular frame is spot welded—thus giving it the benefit of a closed cross section. The narrowness of the frame adds as much as 10% to the ventilating area in many cases.

The Stainless Steel Durever is rapidly displacing larger frame screens of other materials. Though low in cost, because of the minimum material requirement of this type frame, yet, because of the inherent greater strength of stainless steel, this type will endure a lifetime of all year round service without painting or reconditioning.

Construction details on page 6.



Full Size Section Durever Screen

Materials: .020—18&8 Stainless Steel; .023 Galvanized Steel
Finishes: Stainless—Pickled Satin or Natural Bright or painted.
Galvanized—Enameled in electric ovens

Size: Without braces up to 36x48; with braces up to 48x72

Rewireable: By respringing of locking lip over cloth

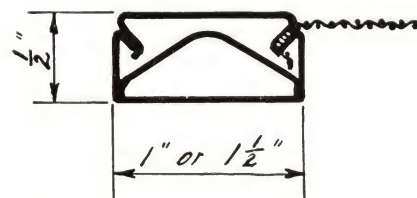
Hardware: To adapt screen to any type of opening

CAP OR "C" TYPE

This type is the highest quality manufactured. The frame consists of a ruggedly braced frame member, and a top cap which snaps into the frame body—holding the screen cloth in position. The patented Johnson internal truss brace, which runs the full length of the frame and is locked by spot welding every inch or by continuous soldering, makes this type the most substantial and the strongest tubular window screen available.

All corners are reinforced by metal inserts, welded or soldered into the frame. Two-tone finishes may be obtained by caps of one color and frame members of another.

For construction details see page 7.



Full Size Section Type "C" Screen

Materials: .020—18&8 Stainless Steel; .026 or .032 Galvanized Steel; .026 or .032 Bronze; .032 or .040 Aluminum

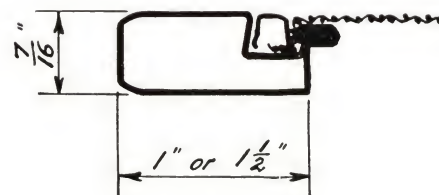
Finishes: As Durever type in steel; Bronze, natural or oxidized. Aluminum, brush finish

Rewireable: Most easily accomplished of any rewireable screen, by resnapping cap over wire cloth

Hardware: All types for any installation

SPLINE OR "S" TYPE

This type is manufactured with the same precision and craftsmanship as the Cap Type. Because this type is not internally braced it is somewhat lighter in weight. The tubular construction, locked its entire length, imparts unusual rigidity to the frame. Johnson Spline Screens positively will not flex or bend out of shape when in use. Corners are made unbreakable by internal braces which are welded or soldered in place. This type lends itself particularly to Aluminum frames when atmospheric conditions justify.



Full Size Section Type "S" Screen

Materials: .026 or .032 Galvanized Steel; .026 or .032 Bronze; .032 or .040 Aluminum

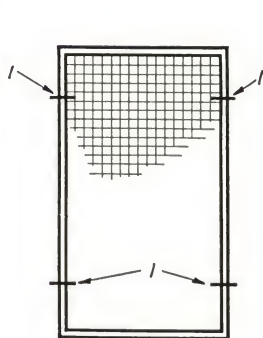
Finishes: Same as Cap Type

Rewireable: By removal and replacing of spline

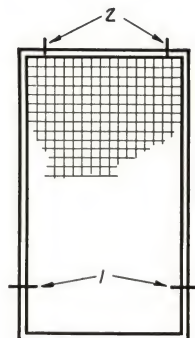
Hardware: All types for any installation

Standard Types of Johnson Screens

16
63



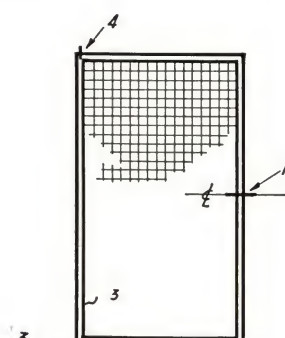
STATIONARY



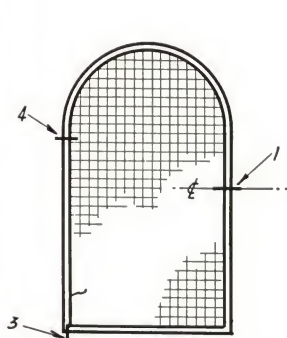
TOP HUNG



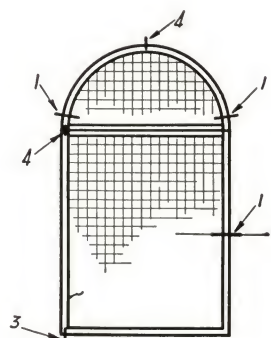
TOP PIVOTED



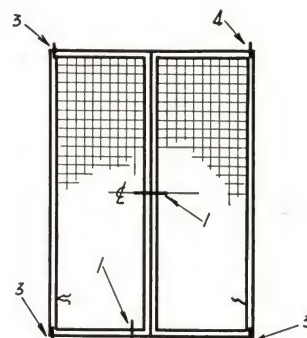
SINGLE SIDE PIVOTED



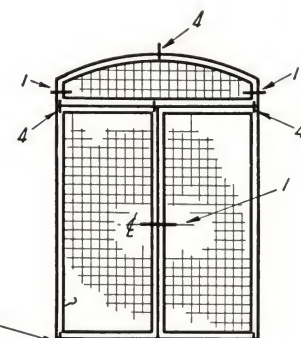
CIRCULAR HEAD
SIDE PIVOTED



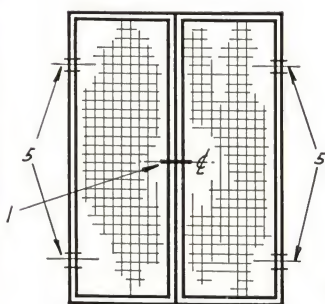
SIDE PIVOTED WITH
CIRCULAR HEAD
FIXED TRANSOM



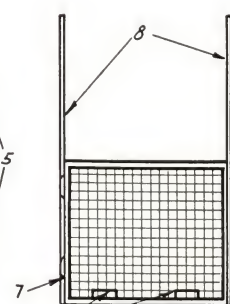
DOUBLE SCREEN
LEFT HAND STATIONARY
RIGHT HAND PIVOTED
ASTRAGAL ON L.H. SCREEN



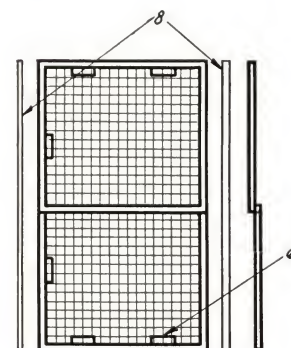
DOUBLE SIDE PIVOTED
WITH SEGMENTAL HEAD
- FIXED TRANSOM
ASTRAGAL ON L.H. SCREEN



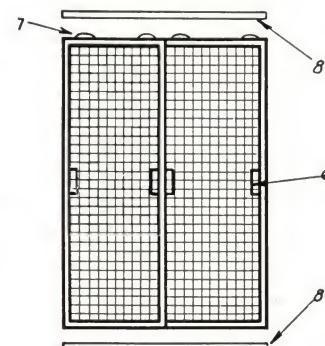
DOUBLE SIDE HINGED
ASTRAGAL ON L.H. SCREEN



SINGLE
VERTICAL SLIDING



TWIN
VERTICAL SLIDING

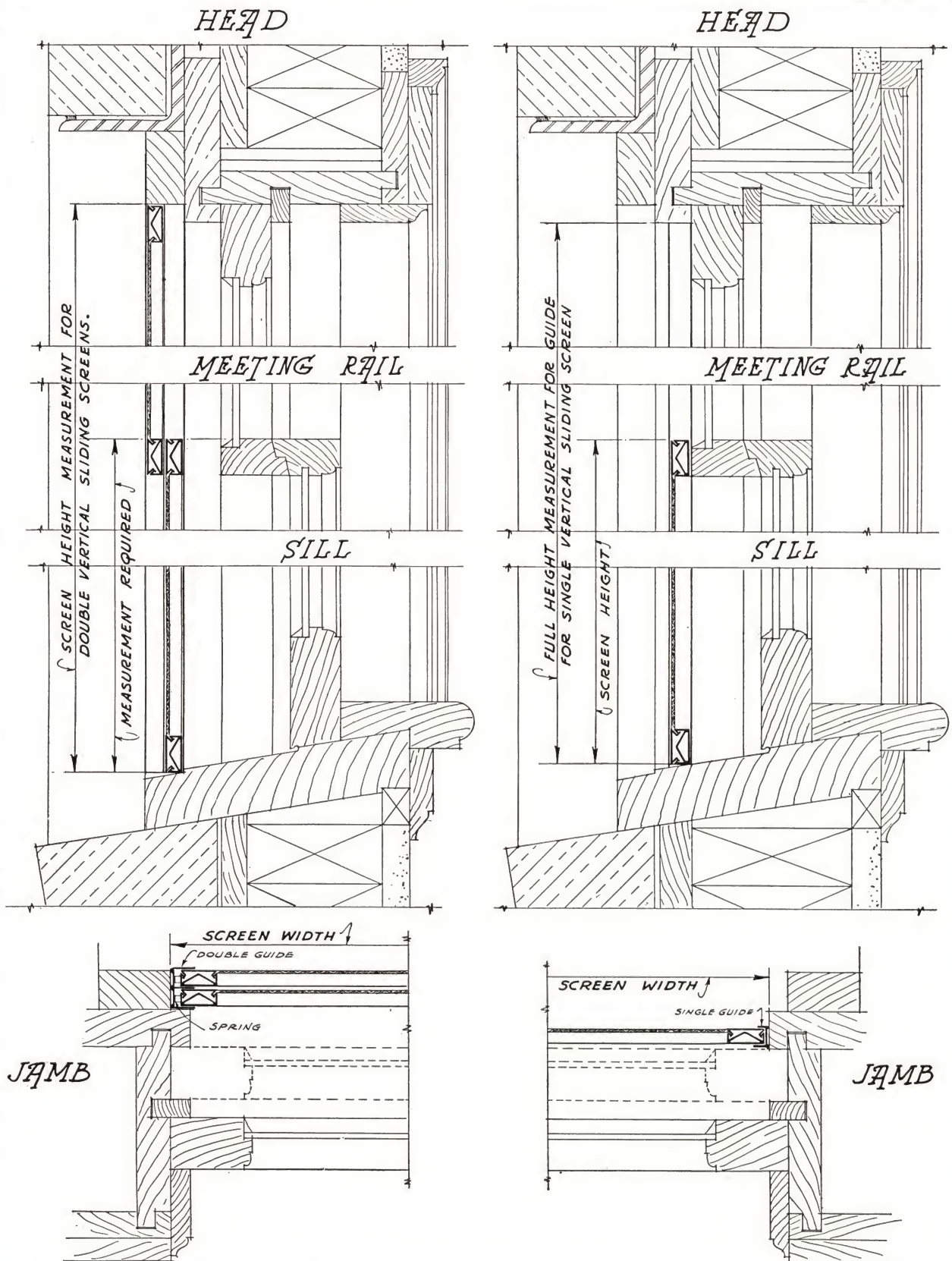


DOUBLE
HORIZONTAL SLIDING

- 1 SPRING BOLTS
- 2 TOP HANGERS
- 3 MOVABLE PIVOTS
- 4 FIXED PIVOTS
- 5 HINGES
- 6 HANDLES
- 7 SPRINGS
- 8 GUIDES

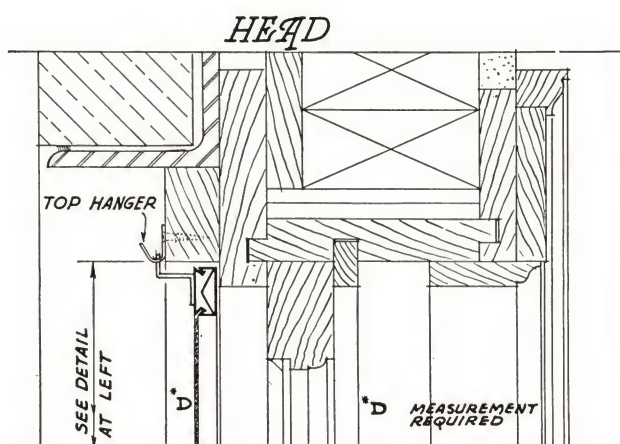
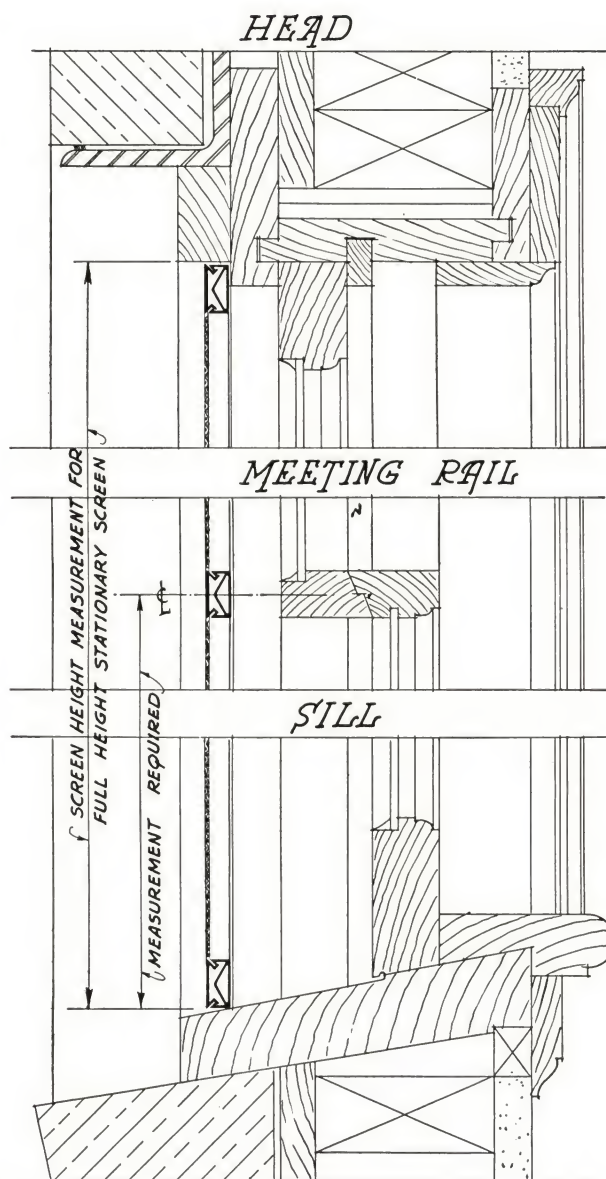
CARD #1378

Installation Details of Johnson Screens

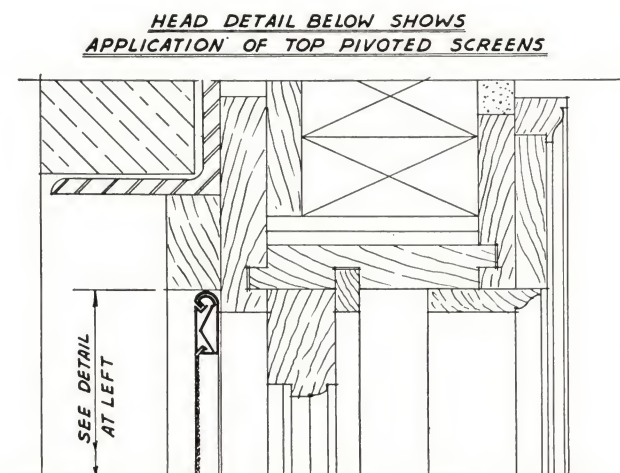


SCALE 3"=1'-0"

Installation Details of Johnson Screens



HEAD DETAIL ABOVE SHOWS APPLICATION OF TOP HUNG SCREENS. THERE ARE VARIOUS METHODS TO SUIT THE VARIOUS HEAD CONDITIONS. WRITE FOR INFORMATION.

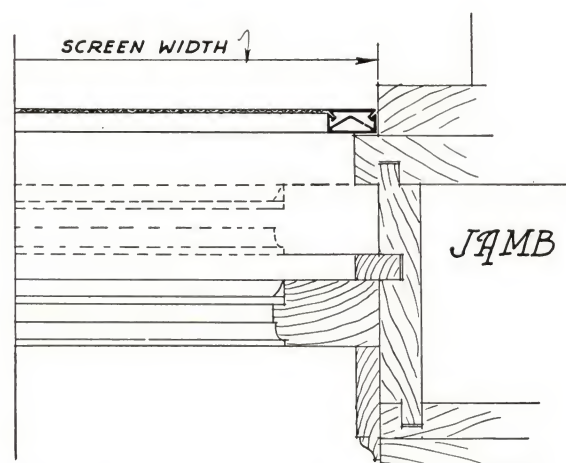


HEAD DETAIL BELOW SHOWS APPLICATION OF TOP PIVOTED SCREENS

VERTICAL SECTION SHOWN ABOVE SHOWS A FULL HEIGHT STATIONARY SCREEN. (WHILE TYPE "C" FRAME IS SHOWN, THE APPLICATION OF OTHER JOHNSON SCREENS IS SIMILAR.)

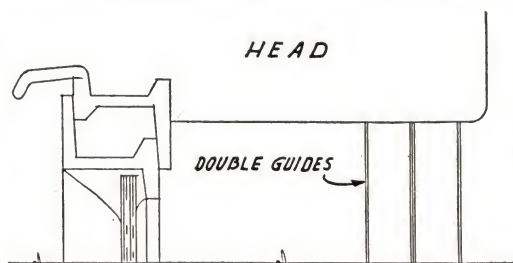
THE TOP HUNG AND TOP PIVOTED SCREENS SHOWN ABOVE AT RIGHT ARE BOTH FULL-SIZE SCREENS AND DIFFER ONLY AT THE HEAD.

THE REWIREABLE BRACE AT MEETING RAILS OF SAME CONSTRUCTION AS SCREEN FRAME. FURNISH ON SCREENS OVER 54" AT ADDITIONAL COST. ROD BRACE MAY BE SUBSTITUTED.

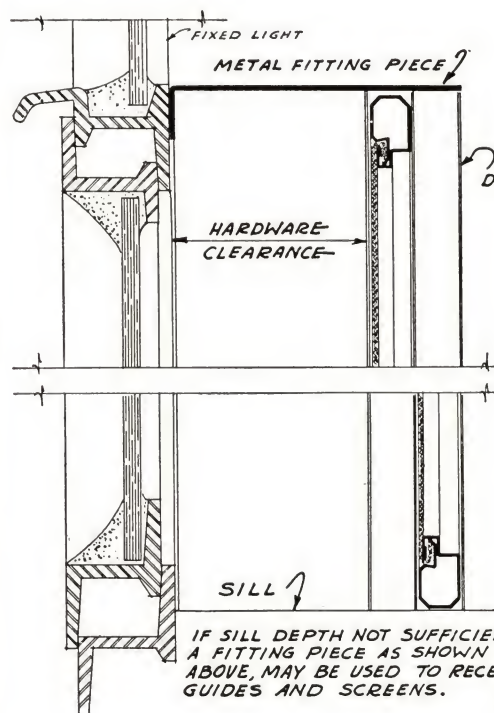


SCALE 3" = 1'-0"

Installation Details of Johnson Screens



WHEN VENT IS CONTINUOUS TO HEAD AND REVEAL DEEP, AS SHOWN ABOVE FITTING PIECE IS NOT REQUIRED.



IF SILL DEPTH NOT SUFFICIENT A FITTING PIECE AS SHOWN ABOVE, MAY BE USED TO RECEIVE GUIDES AND SCREENS.

VERTICAL SECTION

SUGGESTED METHODS FOR SCREENING NON SCREEN TYPE CASEMENTS

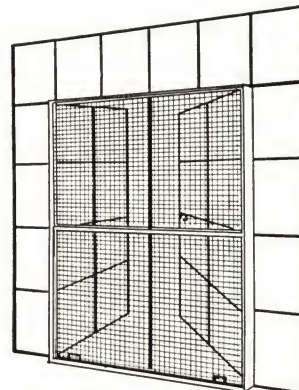
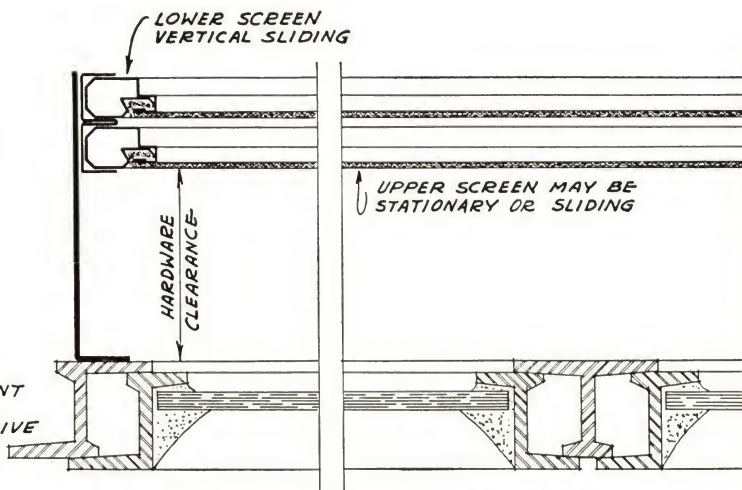


ILLUSTRATION SHOWING DOUBLE SCREENS AND BOX (AS DETAILED) APPLIED TO NON SCREEN TYPE CASEMENT WINDOWS



HORIZONTAL SECTION (VIEWED OUTSIDE LOCKING IN)

STATIONARY OR SIDE HUNG SCREEN APPLIED TO "HOUSING TYPE" CASEMENT WINDOW

THE SCREEN HAS A SLIDING ACCESS DOOR WHICH PERMITS OPERATION OF VENTS WITHOUT THE DISTURBING OF SHADES, CURTAINS, ETC.

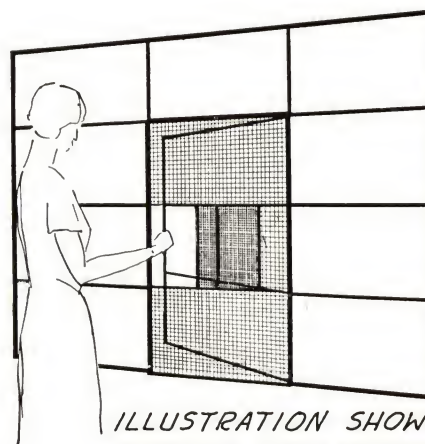
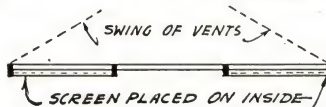
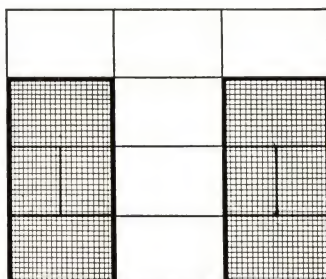
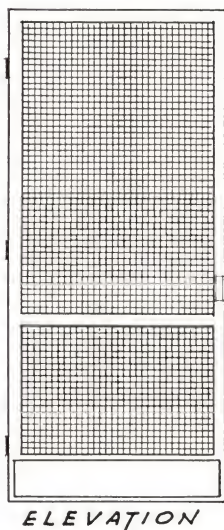
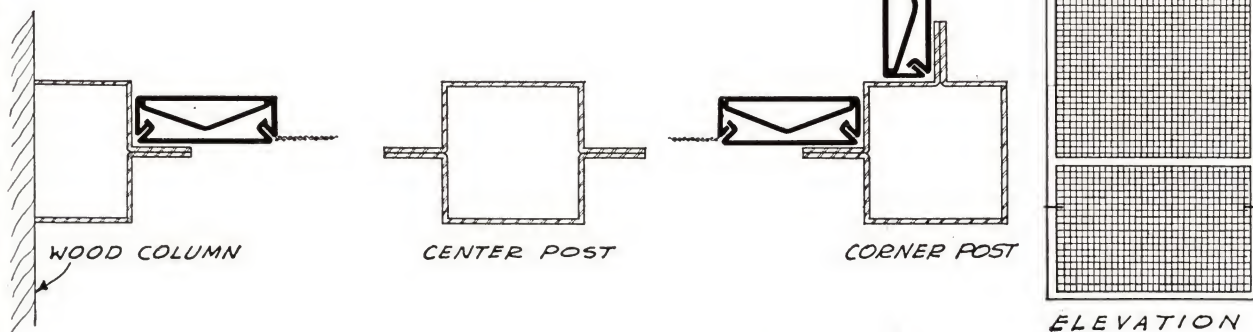


ILLUSTRATION SHOWING SCREEN APPLICATION

Johnson Porch and Door Screens

SUGGESTED METHOD OF SCREENING THE PORCH

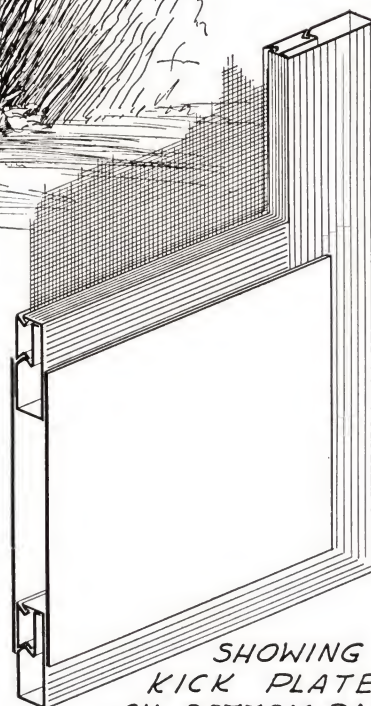
THE $\frac{1}{2}$ " x $\frac{1}{2}$ " TYPE "C" FRAME IS BUILT UP INTO PANELS. NOTE ELEVATION AT RIGHT. STANDARD SPECIFICATIONS APPLY. REGARDING THE STANDARD POST SECTIONS SHOWN BELOW, GAUGES ARE DETERMINED BY SIZES.



SPECIFICATION

STANDARD $\frac{5}{8}$ " x 2" DOOR FRAMES ARE FURNISHED IN .032" STEEL OR .032" BRONZE MATERIAL. STEEL FRAME TO RECEIVE ONE COAT BAKED ENAMEL AND ONE COAT FINISH ENAMEL. THE BRONZE TO BE NATURAL FINISH AS STANDARD. WIRE CLOTH TO BE 16 MESH, .011" DIAMETER BRONZE. OTHER MESHES AND GAUGES AVAILABLE AT EXTRA COST. $\frac{1}{16}$ " THICK, KICK PLATE TO BE STEEL OR BRONZE AS REQUIRED. ALL HARDWARE TO BE BUILT IN BRASS OR BRONZE AS REQ'D. VARIOUS WIRE GUARDS ARE AVAILABLE

FULL SIZE SECTION OF DOOR FRAME



SHOWING KICK PLATE ON BOTTOM RAIL ONE QUARTER ACTUAL SIZE.

Typical Johnson Installations

New York Hospital, Cornell Medical Center, New York City
 Amelia Earhart Putnam, residence, Rye, N. Y.
 West Point Academy, West Point, N. Y.
 Elbert Hubbard II, residence, Aurora, N. Y.
 Washington Hotel, Washington, D. C.
 Hillside Housing Project, New York City.
 Lakeside Hospital, Cleveland, O.
 Andrew Mellon, residence, Washington, D. C.
 Shrine of the Little Flower, Detroit, Mich.
 Cornell University, Ithaca, N. Y.
 Campbell Soup Co., Camden, N. J.
 Duke University, Durham, N. C.
 Ford Motor Co., Detroit, Mich.
 Jeremiah Millbank, residence, Port Chester, N. Y.
 French Market, New Orleans, La.
 Welfare Island Hospital Group, New York, N. Y.
 Eleanor Ryan, residence, Washington, D. C.
 Dixie Homes Housing Project, Memphis, Tenn.
 U. S. Post Office, St. Thomas, Virgin Islands
 Frederick W. Turner, Jr., residence, Midland, Tex.
 Albrook Field, Canal Zone

Representatives in Leading Cities

JOHNSON METAL PRODUCTS COMPANY
 MAIN OFFICE AND FACTORY ERIE, PENNSYLVANIA
 New York Office, 101 Park Avenue